

wherein a first electrode layer having permeability to radiation for recording or light emitted by excitation on the radiation,

a photoconductive layer for recording which exhibits conductivity when irradiated with said radiation for recording or said light,

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a photoconductive layer for reading which exhibits conductivity when irradiated with an electromagnetic wave for reading, and

a second electrode layer having an electrode which generates pairs of charges for taking out a signal in response to the irradiation of the electromagnetic wave for reading, are provided in this order,

and a first conductive member, provided in the second electrode layer, for outputting an electric signal corresponding to the quantity of the latent image charges stored in said charge storing section formed between said photoconductive layer for recording and said photoconductive layer for reading, said first conductive member being an electrode which causes no generation of pairs of charges for taking out a signal when the electromagnetic wave for reading is irradiated.

12. (Amended) A radiation image recording device which projects radiation onto the radiation solid-state detector according to claim 1 to store the charges of the quantity corresponding to the dose of the projected radiation in the charge storing section of said radiation solid-state detector as latent image charges for recording of radiation image information as a static latent image in said charge storing section, comprising:

first voltage application means which applies a DC voltage across the first electrode layer and the second electrode layer in said radiation solid-state detector, and

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control voltage application means for applying, to said first conductive member, a control voltage to adjust the electric field formed between both electrode layers by a DC voltage applied by said first voltage application means.

Please add the following new claims 14-18:

--14. (New) A radiation solid-state detector according to claim 1, further including a charge transport layer, wherein said first conductive member is disposed proximate to said charge transport layer.

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15. (New) A radiation solid-state detector which has a charge storing section for storing the charges of the quantity corresponding to the dose of the radiation which has been projected, and records radiation image information as a static latent image in said charge storing section,

wherein a first electrode layer having permeability to radiation for recording or light emitted by excitation on the radiation,

a photoconductive layer for recording which exhibits conductivity when irradiated with said radiation for recording or said light,

a photoconductive layer for reading which exhibits conductivity when irradiated with an electromagnetic wave for reading, and

a second electrode layer having permeability to said electromagnetic wave for reading, are provided in this order,

and a first conductive member for outputting an electric signal corresponding to the quantity of the latent image charges stored in said charge storing section formed between said photoconductive layer for recording and said photoconductive layer for reading is provided in said second electrode layer or between said first electrode layer and said second electrode layer,

wherein said first conductive member is provided at a location in said photoconductive layer for recording which is close to said photoconductive layer for reading.

16. (New) A radiation solid-state detector which has a charge storing section for storing the charges of the quantity corresponding to the dose of the radiation which has been projected, and records radiation image information as a static latent image in said charge storing section,

wherein a first electrode layer having permeability to radiation for recording or light emitted by excitation on the radiation,

a photoconductive layer for recording which exhibits conductivity when irradiated with said radiation for recording or said light,

a photoconductive layer for reading which exhibits conductivity when irradiated with an electromagnetic wave for reading, and

a second electrode layer having permeability to said electromagnetic wave for reading, are provided in this order,

and a first conductive member for outputting an electric signal corresponding to the quantity of the latent image charges stored in said charge storing section formed between said photoconductive layer for recording and said photoconductive layer for reading is provided in said second electrode layer or between said first electrode layer and said second electrode layer,

wherein said first conductive member is provided on the face of said photoconductive layer for recording which faces said photoconductive layer for reading.

17. (New) A radiation solid-state detector which has a charge storing section for storing the charges of the quantity corresponding to the dose of the radiation which has been projected, and records radiation image information as a static latent image in said charge storing section,

wherein a first electrode layer having permeability to radiation for recording or light emitted by excitation on the radiation,

a photoconductive layer for recording which exhibits conductivity when irradiated with said radiation for recording or said light,

a photoconductive layer for reading which exhibits conductivity when irradiated with an electromagnetic wave for reading, and

a second electrode layer having permeability to said electromagnetic wave for reading, are provided in this order,

and a first conductive member for outputting an electric signal corresponding to the quantity of the latent image charges stored in said charge storing section formed between said photoconductive layer for recording and said photoconductive layer for reading is provided in said second electrode layer or between said first electrode layer and said second electrode layer,

wherein radiation is projected onto the radiation solid-state detector to store the charges of the quantity corresponding to the dose of the projected radiation in the charge storing section of said radiation solid-state detector as latent image charges for recording of radiation image information as a static latent image in said charge storing section, and

wherein a control voltage to adjust the electric field formed between both electrode layers by a DC voltage applied across the first electrode layer and the second electrode layer in said radiation solid-state detector is applied to said first conductive member.

18. (New) A radiation solid-state detector which has a charge storing section for storing the charges of the quantity corresponding to the dose of the radiation which has been projected, and records radiation image information as a static latent image in said charge storing section,

wherein a first electrode layer having permeability to radiation for recording or light emitted by excitation on the radiation,

a photoconductive layer for recording which exhibits conductivity when irradiated with said radiation for recording or said light,

a photoconductive layer for reading which exhibits conductivity when irradiated with an electromagnetic wave for reading, and

a second electrode layer having permeability to said electromagnetic wave for reading, are provided in this order,

and a first conductive member for outputting an electric signal corresponding to the quantity of the latent image charges stored in said charge storing section formed between said photoconductive layer for recording and said photoconductive layer for reading is provided in said second electrode layer or between said first electrode layer and said second electrode layer,

further including a radiation image recording device which projects radiation onto the radiation solid-state detector to store the charges of the quantity corresponding to the dose of the projected radiation in the charge storing section of said radiation solid-state detector as latent image charges for recording of radiation image information as a static latent image in said charge storing section, comprising:

first voltage application means which applies a DC voltage across the first electrode layer and the second electrode layer in said radiation solid-state detector, and

control voltage application means for applying, to said first conductive member, a control voltage to adjust the electric field formed between both electrode layers by a DC voltage applied by said first voltage application means.--